

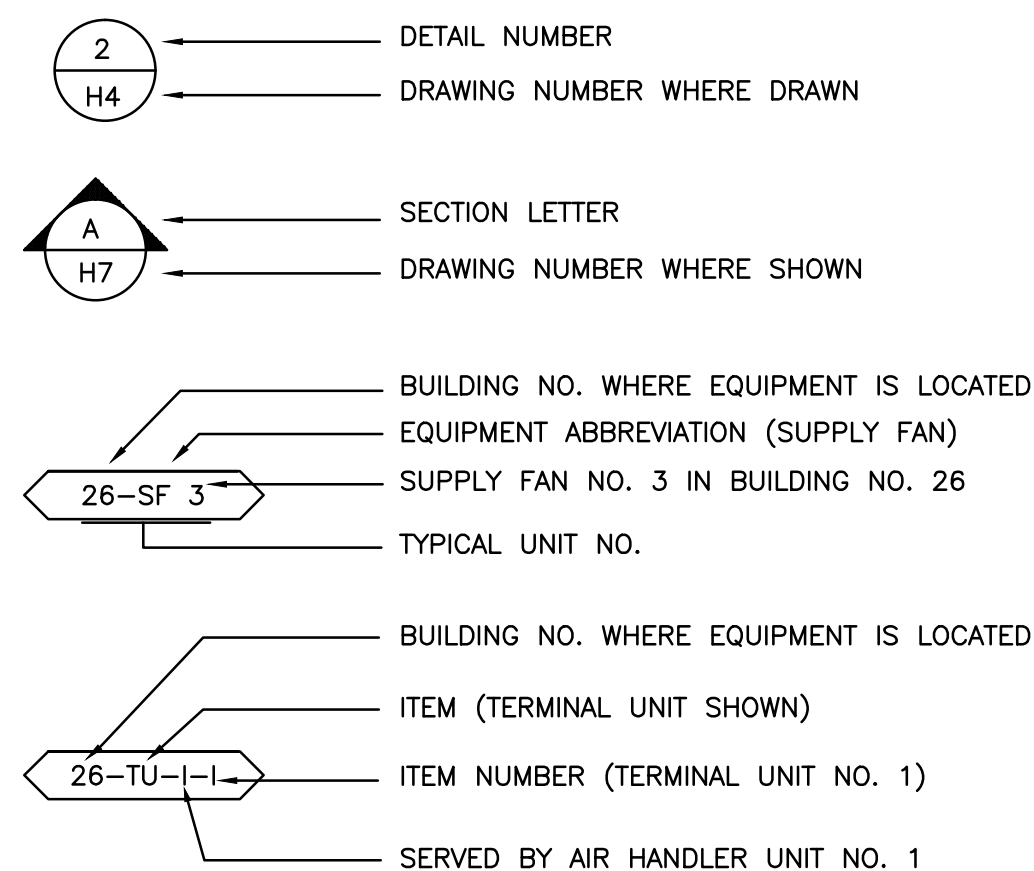
ABBREVIATIONS

A/E	ARCHITECT / ENGINEER	CENT	CENTRIFUGAL
AAV	AUTOMATIC AIR VENT	CFH	CUBIC FEET PER HOUR
ACD	AUTOMATIC CONTROL DAMPER	CFM	CUBIC FEET PER MINUTE
ACD	DAMPER MODULATING	CFM	CUBIC FEET
ACD-TP	AUTOMATIC CONTROL DAMPER TWO POSITION	CFP	CHEMICAL FEED PUMP
ACC	ACCESS DOOR	CH	CEILING GRILLE
AD	ADJUSTED FLOW	CH	CHILLER
AF	AFTER FINISHED FLOOR	CHP	CHILLED WATER PUMP
AFND	AFTER FLOW MEASUREMENT	CHV	CHILLED WATER VALVE
AFW	AIR FLOW WHEEL (FAN)	CHR	CHILLED WATER RETURN
AHU	AIR-HANDLING UNIT	CHS	CHILLED WATER SUPPLY
AMP	AMPERE	CO	CLEAN OUT
AP	ACCESS PANEL	CO2	CARBON DIOXIDE
APD	AIR PRESSURE DROP	COP	COEFFICIENT OF PERFORMANCE
ARI	AIR CONDITIONING AND REFRIGERATION INSTITUTE	CR	CONDENSATE REGISTER
AS	AIR SEPARATOR	CT	COILING TOWER
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	CCW	COLD WATER (POTABLE)
AXF	AXIAL FLOW	CWCC	CHILLED WATER COOLING COIL
BD	BUTTERFLY DAMPER	CWP	CONDENSER WATER PUMP
BDK	BACKDRIFT DAMPER	CWR	CONDENSER WATER RETURN (TO COILING TOWER)
BFP	BACKFLOW PREVENTER	CWS	CONDENSER WATER SUPPLY (FROM COILING TOWER)
BB	BOTTOM GRILLE		
BH	BRAKE HORSEPOWER	D	DAMPER - AUTOMATIC
BW	BACKWASH INCLINED WHEEL (FAN)	D	DECIBELS
BTU	BRITISH THERMAL UNIT	DB	DRY BULB TEMPERATURE
BTUH	BRITISH THERMAL UNIT PER HOUR	DDC	DIRECT DIGITAL CONTROLS
C	CENTIGRADE (CELSIUS)	DEG	DEGREE
CC	COILING COIL	DF	DIFFUSER
CCD	COILING COIL CONDENSATE DRAIN	DI	DIAMETER
CD	CONSTRUCTION DIFFUSER	DP	DIFF. POINT TEMPERATURE
CD	CONSTRUCTION DOCUMENTS	DPA	DIFFERENTIAL PRESSURE ASSEMBLY
		DPS	DIFFERENTIAL PRESSURE SENSOR

ABBREVIATIONS

PA	PUMP	SA	SUPPLY AIR
PA	PASCAL	SAT	SUPPLY AIR TEMPERATURE
PC	PUMPED CONDENSATE	SD	SMOKE DETECTOR
PCF	POUNDS PER CUBIC FOOT (FEET)	SD	SUPPLY AIR DIFFUSER
PD	PRESSURE DROP	SDPR	SMOKE DAMPER
PF	PRE-FILTER	SEN	SENSIBLE HEAT
PG	PRESSURE GAGE	SF	SUPPLY FAN
PGW	PROPYLENE GLYCOL-WATER (SOLUTION)	SG	SUPPLY AIR GRILLE
PHC	PREHEAT COIL	SH	STEAM HUMIDIFIER
PPM	PARTS PER MILLION	SHC	STEAM HEATING COIL
PR	PRESSURE REGULATING (VALVE)	SI	SQUARE INCHES
PRV	PRESSURE REGULATING VALVE	SP	STATIC PRESSURE
PSI	POUNDS PER SQUARE INCH	SP GR	SPECIFIC GRAVITY
PSIA	POUNDS PER SQUARE INCH - ABSOLUTE	SPR	STEAM PRESSURE AND DISTRIBUTION
PSIA	POUNDS PER SQUARE INCH - GAGE	SPRV	STEAM PRESSURE REDUCING VALVE
PSV	PRESSURE SAFETY VALVE	SPS	STATIC PRESSURE SENSOR
		SQ FT	SQUARE FOOT (FEET)
		SR	SUPPLY AIR REGISTER
		SS	STAINLESS STEEL
		SSHX	STEAM TO STEAM HEAT EXCHANGER
		SSR	SOLID SEPARATOR
		ST	STEAM TRAP
R/E	RETURN OR EXHAUST	SUH	STEAM UNIT HEATER
RHA	RETURN AIR	SV	STEAM PRESSURE REDUCING VALVE
REA	RETURN AIR TEMPERATURE	SVS	STEAM VENT SILENCER
RAT	RELIEF AIR	SWHX	STEAM TO WATER HEAT EXCHANGER
RF	RETURN FAN		
RG	RETURN GRILLE		
RH	RELATIVE HUMIDITY		
RHC	REHEAT COIL		
RLA	ROOM LOAD AMPERAGE		
RO	REVERSE OSMOSIS	T & PCV	TEMPERATURE AND PRESSURE CONTROL VALVE
RV	REVERSING VALVE	TAB	TESTING, ADJUSTING, BALANCE
RR	RETURN REGISTER	TD	TEMPERATURE DIFFERENCE
RR	RELIEF VALVE	TDH	TOTAL DYNAMIC HEAD
		TDS	TOTAL DISSOLVED SOLIDS
		TF	TRANSFER FILL
		TP	TRAP
		TR	TOP REGISTER
		TSP	TOTAL STATIC PRESSURE
		TSAT	THERMOSTAT
			TERMINAL UNIT

DRAWING SYMBOLS



ABBREVIATIONS

EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EE	ENTRY EFFICIENCY RATIO
EF	EXHAUST FAN
EG	EXHAUST GRILLE
EJ	ENTERING GLYCOL TEMPERATURE
EP	EXPANSION JUNCTION
EMD	END OF MAIN DRIP (STEAM)
ENT	ENTERING
ER	EXHAUST REGISTER
ERP	ELECTRIC RADIANT PANEL
ESP	EXPANSION STOP PRESSURE
ET	EXPANSION TANK
EWI	ENTERING WATER TEMPERATURE
EX	EXISTING
F	FAHRENHEIT
F&T	FIREFIGHT AND THERMOSTATIC
F/SDPR	COMBINATION FIRE SMOKE DAMPER
FA	FREE AREA
FC	FLEXIBLE CONNECTION
FCW	FORWARD CURVED WHEEL (FAN)
FD	FLOOR DRAIN
FD	FIRE DAMPER
FF	FINAL FILTER
FM	FLOW METER
FFM	FEET PER MINUTE
FS	FEET PER SECOND
FPS	FEET PER SECOND
FS	FLOW SWITCH
FSTAT	FREESTAT

ABBREVIATIONS

UC UNDER CUT
UH UNIT HEATER
UL UNDERWRITERS LABORATORY

V VALVE
VAF VANE-AXIAL FAN
VAV VARIABLE AIR VOLUME
VD VOLUME DAMPER (MANUAL OPPOSED BLADE)
VFD VARIABLE FREQUENCY DRIVE
VHA VETERINARY HEALTH ADMINISTRATION
VI VIBRATION ISOLATOR
VIV VARIABLE INLET VANES
VACUUM (STEAM CONDENSATE) RETURN
VSD VARIABLE SPEED DRIVE

W WATTS
Wb WET-BULB (TEMPERATURE)
WC WATER COOLED
WCCH WATER COOLED CHILLER
WCCU WATER COOLED CONDENSING UNIT
WCHP WATER COOLED HEAT PUMPS
WPCU WATER COOLED PACKAGED UNIT
WF WATER FILTER
WFCF WATER FLOW CONTROL VALVE
WFM WATER FLOWMETER
WFD WATER FLOW MEASURING DEVICE
WG WATER GAGE
WMD WATER SIDE PRESSURE DROP

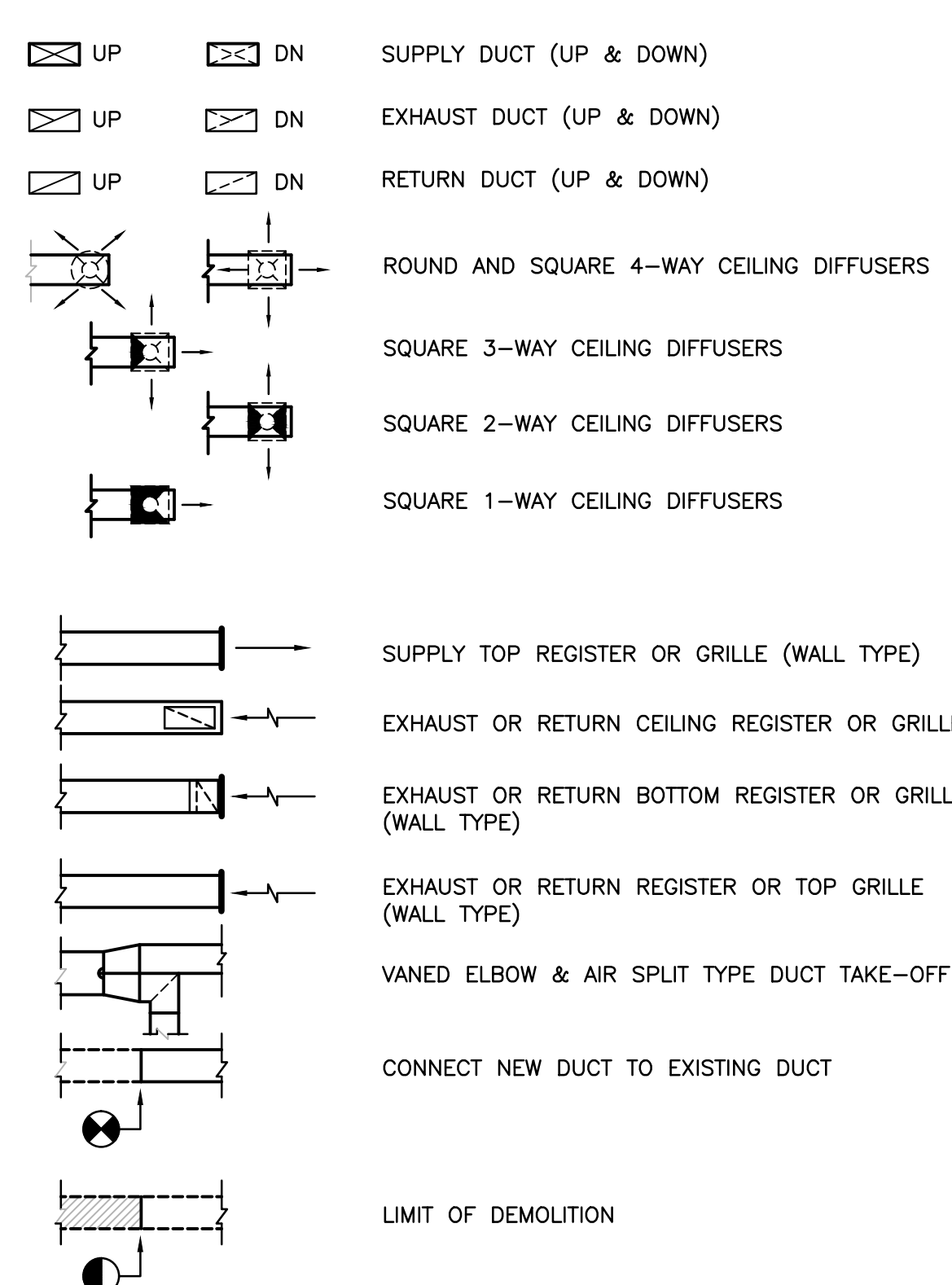
GENERAL NOTES

1. ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN A FURRED CHASE OR ABOVE THE HARD SUSPENDED CEILING.
2. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED. DUCT SIZES ARE NET INSIDE DIMENSIONS.
3. ACCESS PANELS IN HARD SUSPENDED CEILINGS ARE REQUIRED FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC. ACCESS PANELS SHALL BE FURNISHED AND INSTALLED UNDER THE ARCHITECTURAL SPECIFICATIONS.
4. TOTAL STATIC PRESSURE NOTED IN THE SCHEDULES INCLUDES DUCT SYSTEM, TERMINAL UNITS, FILTERS, COILS, ETC.
5. FOR TYPICAL STEAM AND WATER PIPING CONNECTIONS TO EQUIPMENT, SEE STANDARD EQUIPMENT DETAILS.
6. DIFFUSER, REGISTER AND GRILLE SIZES SHOWN ON FLOOR PLANS ARE NECK SIZES.
7. WATER PIPE CONNECTIONS TO AIR HEATING AND COOLING COILS SHALL BE MADE TO PROVIDE COUNTER FLOW BETWEEN WATER AND AIR.
8. WALL TYPE EXHAUST REGISTERS NOTED AS "BR" ON DRAWINGS ARE TO BE INSTALLED WITH BOTTOM ELEVATION OF REGISTER AT 7" [175mm] ABOVE FINISHED FLOOR.
9. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF CEILING DIFFUSERS, REGISTERS, AND GRILLES.

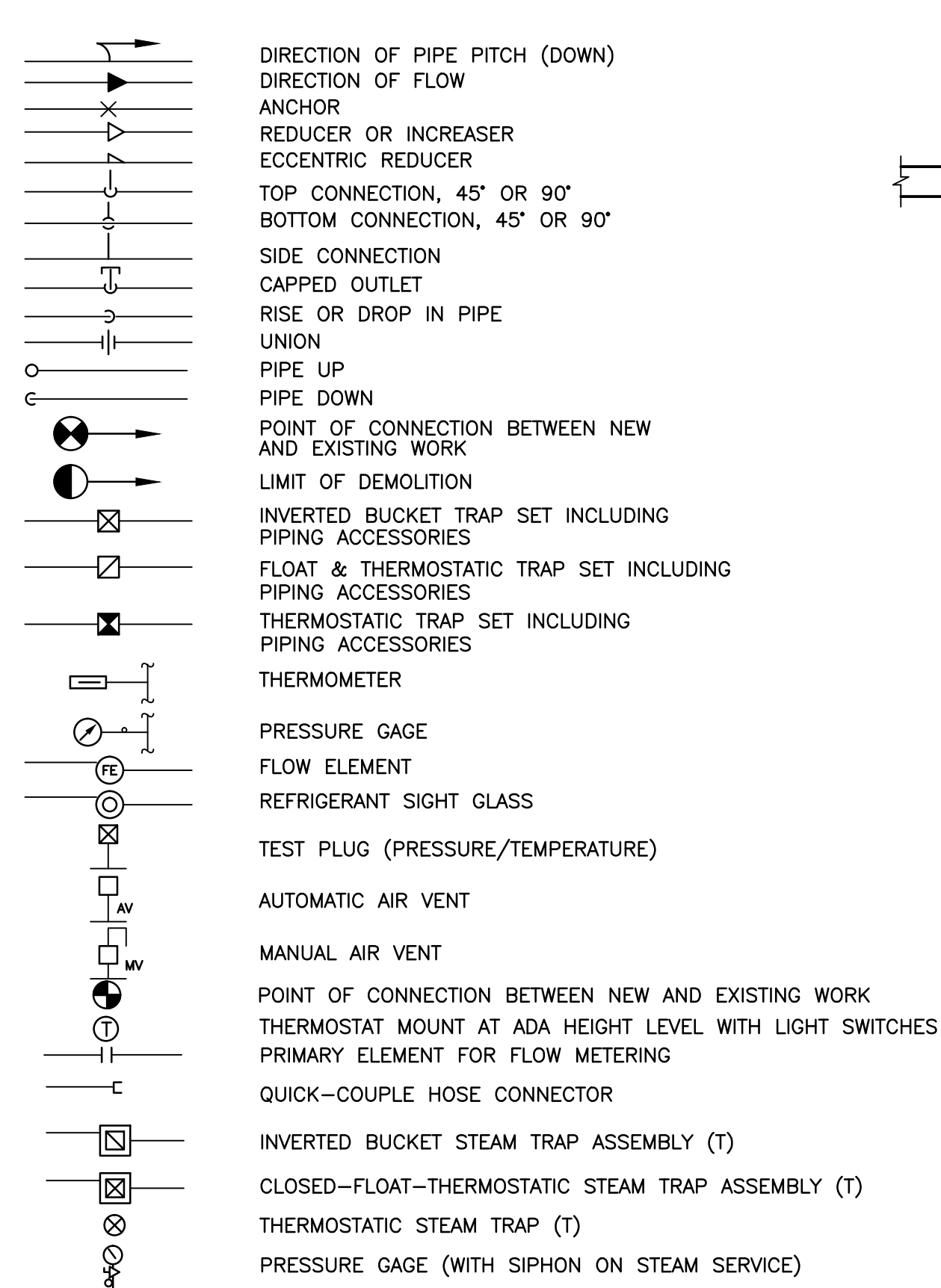
ABBREVIATIONS

I/O	INPUT/OUTPUT	M	METER, SI UNIT
IBT	INDOOR AIR QUALITY	M/s	METERS PER SECOND
IDT	INVERTED BUCKET TRAP		(OR METERS/SECOND)
ICF	IN-LINE CENTRIFUGAL FAN	MA	MIXED AIR
ID	INSIDE DIAMETER	MAT	MIXED AIR TEMPERATURE
IFB	INTEGRAL FACE AND BYPASS	MAU	MAKE-UP AIR UNIT
IN	INCHES	MAV	MANUAL AIR VENT
IN WC	INCH WATER COLUMN	MAX	MAXIMUM
IPLV	INTEGRATED PART LOAD VALUE	MB	MIXING BOX
IR	INTEGRATED HEATER	MBH	1000 BTUH
IS	INSECT SCREEN	MCA	MINIMUM BRANCH CIRCUIT AMPLACITY
IU	INDUCTION UNIT	MER	MECHANICAL EQUIPMENT ROOM
IV	INLET VANES	MERV	MINIMUM EFFICIENCY REPORTING
			VALUE
J	INTENTIONALLY LEFT BLANK	MHP	MOTOR HORSEPOWER
		MM	MILLIMETER
kg	KILOGRAM	MMP	MILLIMETER
kg/HR	KILOGRAM PER HOUR	MOV	MOTOR OPERATED VALVE
kPa	KILOPASCAL	MPR	MEDIUM PRESSURE RETURN
kW	KILOWATT		(STEAM CONDENSATE)
kWatt	KILOWATT HOUR	MPS	MEDIUM PRESSURE STEAM
L	LITER	MTD	MEAN TEMPERATURE DIFFERENCE
L/h	LITERS PER HOUR (OR LITERS/HOUR)	MVD	MANUAL VOLUME DAMPER
L/m	LITERS PER MINUTE (OR LITERS/MINUTE)	MZ	MULTI-ZONE
L/s	LITERS PER SECOND (OR LITERS/SECOND)		
LBS	LEAVING AIR TEMPERATURE	NA	NOT APPLICABLE
LBS/HR	POUNDS PER HOUR	NC	NOISE CRITERIA
LF	LINEAR FOOT (FEET)	NC	NORMALLY CLOSED
LGT	LEAVING GLYCOL TEMPERATURE	NO	NORMALLY OPEN
LH	LOAD	NOM	NOMINAL
LPR	LOAD RETURN (STEAM CONDENSATE)	NPLV	NON-STANDARD PART LOAD VALUE
LPRC	LOW PRESSURE STEAM RETURN (CLEAN)	NPSH	NET POSITIVE SUCTION HEAD
LLHX	LIQUID TO LIQUID HEAT EXCHANGER	NTS	NOT TO SCALE
LPS	LOW PRESSURE STEAM		
LPRC	LOW PRESSURE STEAM (CLEAN)	OA	OUTSIDE AIR
LTPC	LOCAL TEMPERATURE CONTROL PANEL	OAG	OUTSIDE AIR GRILLE
LVE	LEAVING	OAI	OUTSIDE AIR INTAKE
LVR	LOWERING	OD	OUTSIDE DIAMETER
LWT	LEAVING WATER TEMPERATURE		

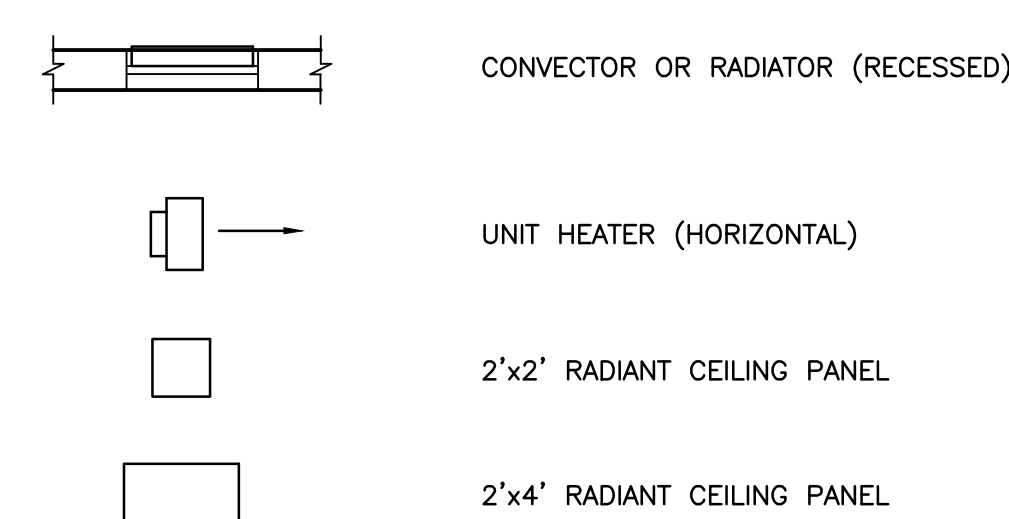
DUCTWORK SYMBOLS



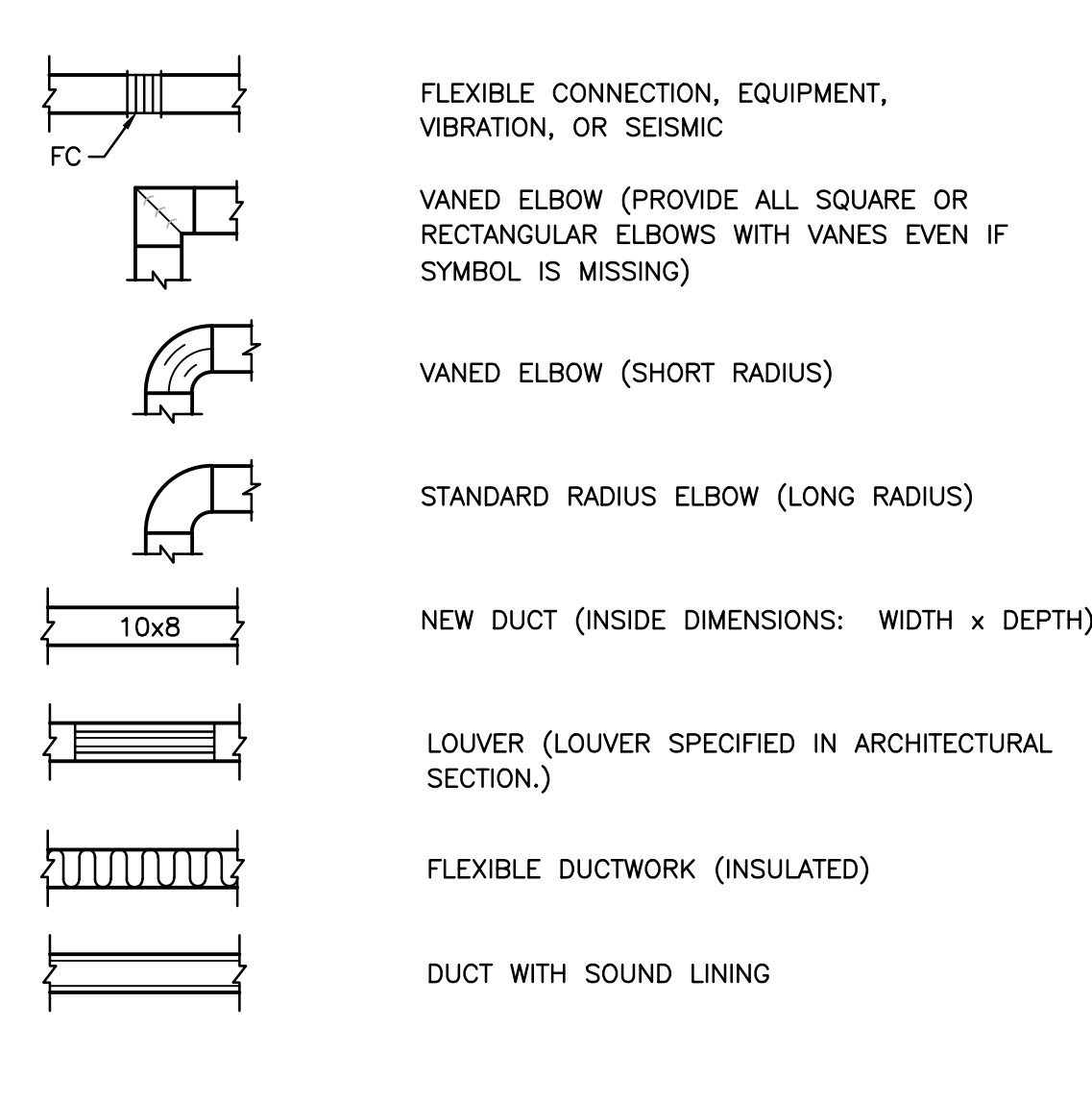
GENERAL SYMBOLS



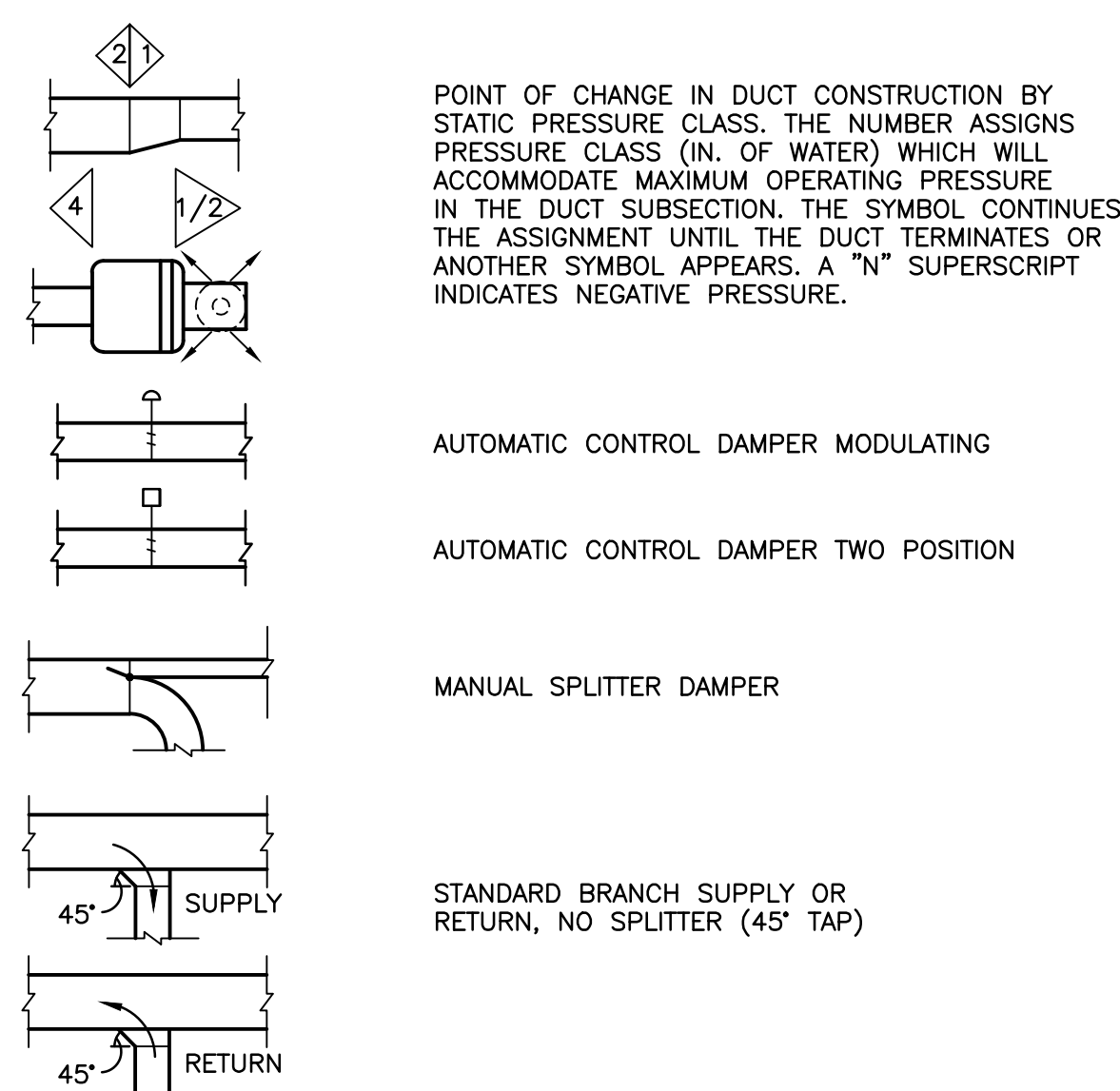
TERMINAL UNIT SYMBOLS



DUCTWORK SYMBOLS

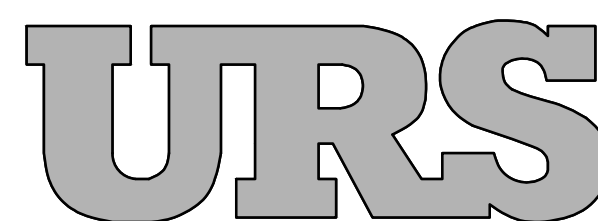


DUCTWORK SYMBOLS



100% Submission	7/02/10
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Revisions	Date

VA WESTERN NEW YORK HEALTHCARE SYSTEM
3495 BAILEY AVENUE
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Architect

stamp

CARDIOLOGY	DATE	ENGINEERING MANAGER	DATE
INFECTION CONTROL	DATE	CARELINE MANAGER	DATE
SAFETY OFFICER	DATE	CHIEF OF STAFF	DATE

<p>MECHANICAL LEGEND, ABBREVIATIONS, AND NOTES (SHEET 1 OF 2)</p>	<p>Drawing Title</p>
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Project Title
RENOVATION OF BLDG #1, 2ND FLOOR, B-WARD

Date	JULY 2, 2010 (UPDATED 10/07/10)
Station No.	528

09-352 MH-001

Location	V.A.M.C. BATAVIA, NEW YORK
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